

PUBLIC WORKS AND ENGINEERING

Primary Agency: Department of Transportation (DOT)

Support Agencies: Department of Environmental Services (DES) – Division of Waste Management
Department of Environmental Services (DES) – Division of Water
Department of Resources & Economic Development (DRED)
Department of Safety – Fire Marshal’s Office
Insurance Department
Public Utilities Commission (PUC)

I. Introduction

A. Purpose

To provide for and to implement procedures and policies in coordinating all engineering resources and expertise in surveying and assessing damage and initiating emergency repair of public highways, right-of-ways, bridges, public building, and public facilities; emergency ice, snow, and debris removal; and emergency demolition of unsafe structures.

B. Scope

The extent of the State's assistance and the priority in which the activity will be addressed is dependent upon the degree of lifesaving or life protecting needs following a catastrophic disaster. The scope of assistance will be as follows:

1. Technical advice and evaluations, engineering services, construction management and inspection, emergency contracting and emergency repair of water, wastewater and solid waste facilities.
2. Emergency clearing of debris to allow emergency personnel and equipment the ability to perform lifesaving and life protecting activities.
3. Temporary construction of emergency access routes necessary for passage of emergency response personnel. Emergency access routes include damaged streets, roads, bridges, ports, waterways, airfields, and any other facilities necessary for passage of rescue personnel.
4. Emergency restoration of critical utility services, including electric, telephone, and gas.

5. Emergency stabilization or demolition of damaged structures or facilities determined by State or local jurisdictions to be an immediate threat or hazard to public safety or as necessary to facilitate the accomplishment of lifesaving operations.
6. Maintain list of qualified private contractors.
7. Technical assistance including structural inspection of private residences, commercial buildings, and structures, as resources permit.

II. Situation and Planning Assumptions

A. Situation

1. A significant disaster may cause unprecedented property damage. Structures may be destroyed or severely weakened. Homes, public buildings, bridges, and other facilities may have to be reinforced or demolished to ensure safety.
2. Debris may make streets and highways impassable. Public utilities may be damaged and/or be partially or totally inoperable.
3. A large event may affect the lives of many State and local jurisdictions' response personnel, and prevent them from performing their prescribed emergency duties. Similarly, equipment in the immediate event area may be damaged or inaccessible.
4. Sufficient resources may not be available to State and local jurisdictions to meet emergency requirements. Federal assistance may be required to identify and deploy resources from outside the affected area to ensure a timely, efficient, and effective response and recovery from the event.
5. Previously inspected structures may require re-evaluation due to secondary events.

B. Planning Assumptions

1. Support agencies will perform tasks under their own authorities as applicable, in addition to tasking received under the authority of the *State EOP*.
2. Debris removal and emergency road repairs will be given priority in order to support immediate lifesaving emergency response activities.
3. Rapid assessment of the event area will be made to determine critical response time and potential workload.

4. Emergency environmental waivers and legal authority will be granted to dispose of materials from debris removal and demolition activities. Local jurisdiction authorities will obtain the required waivers and clearances.
5. Significant numbers of personnel with engineering and construction skills and construction equipment will be available from outside the impacted area.

III. Concept of Operations

A. General

Public Works and Engineering will provide support to State and local emergency response efforts following a disaster. Coordination will be maintained between local, State, and Federal officials as appropriate, in order to maximize efforts. Priority of tasks will be determined jointly. Public Works and Engineering will work closely with Information & Planning, in order to provide damage assessment information.

B. Organization

1. The functional organization structure of this ESF is shown in **Figure 3-1, Functional Organization of Public Works and Engineering.**

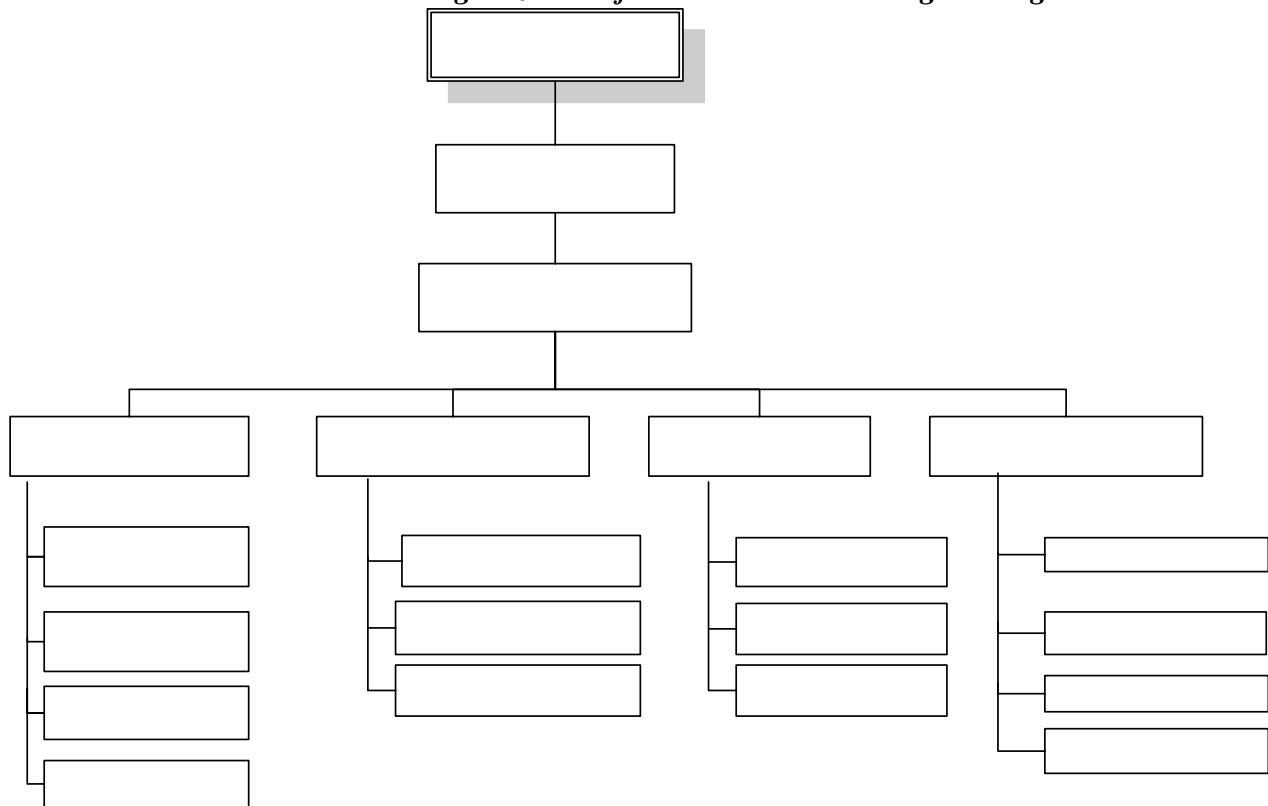


Figure 3-1, Functional Organization of Public Works and Engineering

2. The organization of Public Works and Engineering will be composed of a Coordinator and assistants, as needed. The level of staffing will be dependent upon the severity of the disaster.
 - a. **Public Works and Engineering Coordinator:** The primary function of this position is to coordinate and manage the responsibilities and functions of Public Works and Engineering, assist in planning activities related to response and recovery actions, and provide staffing requirements.
 - b. **Construction Unit Leader:** Provides technical advice and evaluations, engineering services, construction management and inspection, emergency contracting, emergency repair, and temporary construction required to assist impacted public structures and facilities.
 - c. **Safety/Damage Assessment Unit Leader:** Provides on-site inspections of impacted public structures and facilities required to conduct Safety Damage Assessment inspections and issue determinations relating to occupancy and structural integrity.
 - d. **Demolition Unit Leader:** Provides emergency stabilization and demolition of damaged structures and facilities.
 - e. **Debris Management Unit Leader:** Provides technical expertise and overall coordination of debris management activities.

3. ***Interagency Coordination***

Upon notification of an emergency requiring the activation of the Emergency Operations Center (EOC) or other significant State response, the primary agency for Public Works and Engineering will brief and consult with designated essential personnel, support agency representatives, and the BEM Director or their designee to implement SOPs/SOGs in support of local operations. That response may involve:

- a. Other Emergency Support Functions (ESFs)
- b. State Agencies
- c. Non-State Agencies
- d. Federal Agencies

4. ***Operational Facilities/Sites***

- a. DOT Bureau of Bridge Maintenance is responsible for storing an inventory of temporary bridge construction supplies.

- b. District Office/DOT Dispatch Centers
 - 1) District 1 – Lancaster*
 - 2) District 2 – Enfield
 - 3) District 3 – Gilford
 - 4) District 4 – Swansey
 - 5) District 5 – Hooksett*
 - 6) District 6 – Durham
- * Districts 1 and 5 are staffed 24/7 year round.

C. Notification and Activation

Upon notification from the State EOC staff, the ESF will be activated. The State EOC Director and/or State EOC Operations Officer will direct activation.

D. Emergency Response Actions

Immediately following the notification and staffing of Public Works and Engineering, attention should be directed towards, but not be limited to, the following:

- 1. Compiling and evaluating damage assessments from State and local agencies.
- 2. Coordinating task priorities between local, State, and Federal officials.
- 3. Establishing communications with field units/facilities and Highway Maintenance Districts in affected areas.
- 4. Coordinating additional engineering and construction resources as needed.

E. Recovery Actions

- 1. Upon determination that emergency conditions have stabilized or are improving, the Governor, in consultation with the BEM Director, shall direct recovery actions to commence.
- 2. Following the initiation of the recovery operations, the Public Works and Engineering Coordinator shall determine, in consultation with other appropriate State representatives, the requirements to sustain the recovery efforts.
- 3. As the recovery phase progresses and individual functional ESF response efforts are terminated, the Governor, through the BEM Director, may allow selected emergency response organizations and/or personnel to return to a non-emergency mode of operation.

F. Deactivation

Partial deactivation would occur based upon the current level of response and recovery operations and at the discretion of the BEM Director. Full deactivation would occur following termination of response and recovery field operations.

IV. Roles and Responsibilities***A. Primary Agency – Department of Transportation (DOT)***

1. DOT will seek funding to develop a Debris Management Plan with the assistance of DES, Army Corps of Engineers, and the NH National Guard.
2. Coordinate resources and provide support and agency representatives to Federal agencies, as required, in response to disasters including terrorist incidents/attacks.
3. Identify specific areas that could sustain recovery efforts.
4. Assist in mobilization needs for resources, manpower, and equipment.
5. Assist in transportation and traffic control requirements.
6. Provide emergency debris clearance to allow emergency personnel and equipment the ability to perform lifesaving and life protecting activities.
7. Provide temporary construction of emergency access routes necessary for passage of emergency response personnel; construction of firebreaks, as requested.
8. Coordinate the restoration of critical utility services, including electric, telephone, gas, and restoration of water systems.
9. Stabilize or demolish damaged structures or facilities determined to be an immediate threat or hazard to public safety.
10. Maintain list of qualified private contractors and design consultants to assist in the restoration of critical facilities.
11. Coordinate resources and support Federal agencies in response to terrorist incidents/attacks. Assist in damage assessment with local, State, and Federal officials. Determine the coordination capabilities between local, State, and Federal officials to initiate recovery efforts.

12. Ensure that an Incident Action Plan is developed for each operational period and that it is coordinated with the EOC Operations Officer and Information and Planning.
13. DOT will develop standard operating procedures/guides (SOPs/SOGs) for safety and damage assessment teams.
14. Collect and maintain the following ESF status information and coordinate with Information and Planning to ensure inclusion into the Situation Report (SITREP):
 - a. Status of debris removal activities.
 - b. Status of Critical Facilities (i.e., lift stations, waste water and solid waste facilities, etc.).
 - c. Status of Water Systems.
 - d. Emergency Access Routes.
 - e. Unmet Needs (i.e., potable water, sanitation, etc.).
 - f. Status of public utility services restoration (i.e., electric, gas, telephone, etc.).
 - g. Major Public Works and Engineering issues/activities.

B. Support Agencies

1. ***General***
 - a. Provide operational support and resources, where appropriate, in support of the management of Public Works and Engineering.
 - b. Provide transportation support to other ESFs, as requested.
 - c. Assess the State's public works and engineering capabilities and resources.
 - d. Provide periodic updates regarding agency activities and/or operations.
 - e. Implement interagency agreements as needed to support Public Works and Engineering activities/operations.
 - f. Document all agency activities, personnel and equipment utilization, and other expenditures.

2. ***Department of Environmental Services (DES) – Division of Waste Management***

- a. Provide environmental impact guidance where necessary.
- b. Assist in the testing of water systems, wells, etc., as needed.
- c. Provide operational support and agency resources, as requested.
- d. Investigates spills and pollution causes.
- e. Expedites classification of debris.
- f. Provide evaluations, engineering services, construction management and inspection, emergency contracting, and emergency repair of wastewater and solid waste facilities.
- g. Assist in the assessment of safety and operational condition of such facilities as dams, and wastewater treatment facilities.

3. ***Department of Environmental Services (DES) – Division of Water***

Assist in the assessment of safety and operational condition of such facilities as dams, and water facilities.

4. ***Department of Resources and Economic Development (DRED)***

- a. Task personnel, as necessary, to accomplish support responsibilities.
- b. Provide initial non-fire related emergency or damage assessment estimates on facilities and lands managed by DRED.
- c. Conduct inspections of DRED facilities and lands, as well as other State and local facilities damaged by an emergency or disaster.
- d. Coordinate or conduct debris removal, land reclamation, and road reconstruction of DRED administered and/or protected lands.
- e. Provide aerial reconnaissance, as requested.
- f. Provide equipment and personnel, as requested and available.

5. ***Department of Safety – Fire Marshal's Office***

- a. Serve as a member of the safety and damage assessment teams assessing public buildings for potential fire damage, hazards, etc.

b. Provide personnel to manage and operate staging areas, as needed.

6. ***Insurance Department***

Assist with damage assessment efforts as requested.

7. ***Public Utilities Commission (PUC)***

Provide impact guidance on public services.

V. References

A. Plans

1. NH DOT Directory
2. NH DOT Snow & Ice Control Policy
3. The Federal Response Plan, April 1999

B. Standard Operating Procedures/Checklist

1. Public Works and Engineering Activation and Deactivation SOG
2. Damage Assessment Guidelines and Procedures
3. Public Works and Engineering Alert and Notification SOG
4. Position Checklists
Public Works and Engineering Facilitator

VI. Attachments

A. Forms

1. Chronological Event Log
2. Incident Report
3. Status Report
4. Message Form
5. BEM Emergency Shift Change
6. State Agency Emergency Shift Change
7. Federal / State Point of Contact Worksheet

NOTE: All forms are bound separately are located in the State EOC.